TUESDAY, MAY 14, 2002

7:00 a.m. **Registration/Continental Breakfast -** Grand Ballroom Foyer

Grand Ballroom

7:50 a.m. **Welcoming Remarks and Introduction of Keynote Speaker**
Thomas A. Sarkus, Conference Chair
Director, Coal Power Products Division
U.S. Department of Energy, National Energy Technology Laboratory

8:00 a.m. **Keynote Address:** "ACHIEVING THE DIFFICULT CHALLENGES"
Henry A. Courtright
Vice President, Power Generation and Distributed Resources, EPRI

Moderator: Michael Cloke, *University of Nottingham, England*

8:30 a.m. WHAT HAVE WE LEARNED IN SEVEN CONFERENCES ON UNBURNED CARBON ON UTILITY FLY ASH? A REVIEW OF PAST CONFERENCES
Thomas C. Ruppel, *Parsons Corporation*

9:00 a.m. MULTI-POLLUTANT INTERACTIONS AT COAL-FIRED POWER PLANTS
Edward S. Rubin, *Carnegie Mellon University*

Experiences & Observations

9:30 a.m. ROTATING OPPOSED FIRE AIR (ROFA) AND SNCR
Mark Shilling and Gary Tonomaker, *Carolina Power and Light Company*

10:00 a.m. **Break** - Grand Ballroom Foyer

10:30 a.m. A COLLABORATIVE PROJECT FOR THE IMPROVEMENT OF COMBUSTION EFFICIENCY IN UTILITY BOILERS
Peter Stephenson, *Innogy PLC*

11:00 a.m. CARBON BURN-OUT, COMMERCIALIZATION AND EXPERIENCE UPDATE
James G. Keppeler, *Progress Materials*, *Inc.*

Moderator: Michael Berkenpas, *Carnegie Mellon University*

11:30 a.m. THE EFFECTS OF HIGH CARBON-IN-ASH ON ELECTROSTATIC PRECIPITATOR PERFORMANCE
Michael Cloke, Svenja Hanson, Edward Lester, and Alan Thompson
University of Nottingham

12:00 noon **Lunch (on your own)**

1:00 p.m. **Poster Session** - Grand Ballroom Foyer

Experiences & Observations (Continued)

1:30 p.m. NOx REDUCTION OF A 165 MW WALL-FIRED BOILER UTILIZING AIR AND FUEL FLOW MEASUREMENT AND CONTROL
Marion Cherry, *Santee Cooper*
David Silzle, *Air Monitor Corporation*
Dave Earley, *Air Monitor Corporation & Combustion Technologies Corporation*

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Predictive Performance Tools

2:00 p.m. UTILITY BOILER COMPUTER MODELING FOR LOW-NOx BURNER AND LOW LOI FLY ASH DESIGN
Bernard P. Breen and Joseph A. Urich, *Energy Systems Associates*

Measurement Techniques for Unburned Carbon

2:30 p.m. CARBON CONTENT DETECTION IN HIGH TEMPERATURE AND HIGH PRESSURE FIELDS USING LASER INDUCED BREAKDOWN SPECTROSCOPY
Seiji Iwasaki, *Japan Power Engineering and Inspection Corporation*
Matsuhei Noda and Yoshihiro Deguchi, *Mitsubishi Heavy Industries, Ltd.*
Masyuki Horio, *Tokyo University of Agriculture and Technology*

3:00 p.m. INCREASING THE RELIABILITY AND ACCURACY OF AUTOMATED, ON-LINE CARBON-IN-ASH MEASUREMENTS
Edward C. Burgher and Thomas Hope, *Rupprecht & Patashnick Co., Inc.*

3:30 p.m. **Break** - Grand Ballroom Foyer

New Uses for High LOI Fly Ash

4:00 p.m. A NOVEL APPLICATION OF HIGH-CARBON FLY-ASH AS AN INDUSTRIAL BINDER
S. Komar Kawatra and S. Jayson Ripke, *Michigan Technological University*

4:30 p.m. COMMERCIAL USE OF HIGH-CARBON FLY ASH IN CEMENT MANUFACTURING
Javed I. Bhatty, John Gajda, and F.M. Miller
Construction Technology Laboratories, Inc.

5:00 p.m. ANALYSIS AND UTILIZATION OF CONDITIONED AND BLENDED FUEL-DERIVED COAL
J.M. Tranquilla, *EMR Microwave Technology Corporation*
James MacLean, *Dominion Ash, CCP Limited*

5:30 p.m. **Closing Remarks**
Thomas A. Sarkus, Conference Chair
Director, Coal Power Products Division
U.S. Department of Energy, National Energy Technology Laboratory

5:40 p.m. **Adjourn**

Poster Presentations

INCREASING BOILER EFFICIENCY BY UBC MONITORING
Hans Georg Conrads, *PROMECOM*

THE ADVANTAGE OF USING LOW UN-BURNT CARBON COAL ASH FOR PRODUCING COAL ASH BRICKS AND AN ASSESSMENT OF THE PHYSICAL CHARACTERISTICS OF SUCH BRICKS PRODUCED FROM THE COAL ASH OF THE NATIONAL THERMAL POWER CORPORATION SINGRAULI STATION – A CASE STUDY
Shiv K. Dube and Sudhir Kapoor, *National Thermal Power Corporation, Limited, India*

TRIBOELECTRIC PROCESSING OF CLASS C ASHES FOR CARBON-ASH SEPARATION
Tapiwa Z. Gurupira, Melissa Ochsenbein and John M. Stencel, *Tribo Flow Separations*
Cal Lockert, *Solvera/Stock Equipment Company*

Poster Presentations (Continued)

ADSORPTION OF UNBURNED CARBON IN FLY ASH AND DEVELOPMENT OF AN IMPROVED FOAM INDEX TEST
Indrek Kulaots, Alex Hsu, Robert H. Hurt and Eric M. Suuberg, *Brown University*

APPLICATION OF ASTM ACTIVATED CARBON TEST METHODS TO UTILITY FLY ASH
Henry Nowicki, Mick Greenbank, and Richard Morrical
Professional Analytical and Consulting Services, Inc.

INVESTIGATION OF POLYCYCLIC AROMATIC HYDROCARBONS (PAHS) ON FLUE GAS DESULFURIZATION (FGD) BY-PRODUCT
Ping Sun, Linda K. Weavers, and Donald W. Golightly*, Ohio State University*

COMPARISON OF ACTIVATED FLY ASH CARBONS WITH CONVENTIONAL COMMERCIAL ADSORBENT CARBONS
Yinzhi Zhang, Zhe Lu, Brandon N. Shaffer, M. Mercedes Maroto-Valer, John M. Andresen, and Harold H. Schobert,
Pennsylvania State University

USE OF ROFA AND ROTAMIX TO REDUCE NO_x IN COAL BURNING POWER PLANTS
John Ralston and Edwin Haddad, *Mobotec USA*

A COLLABORATIVE PROJECT FOR THE IMPROVEMENT OF COMBUSTION EFFICIENCY IN UTILITY BOILERS
Peter Stephenson*, Innogy PLC*

NETL'S NOx CONTROL PROGRAM
Bruce W. Lani and Thomas J. Feeley III
U.S. Department of Energy, National Energy Technology Laboratory